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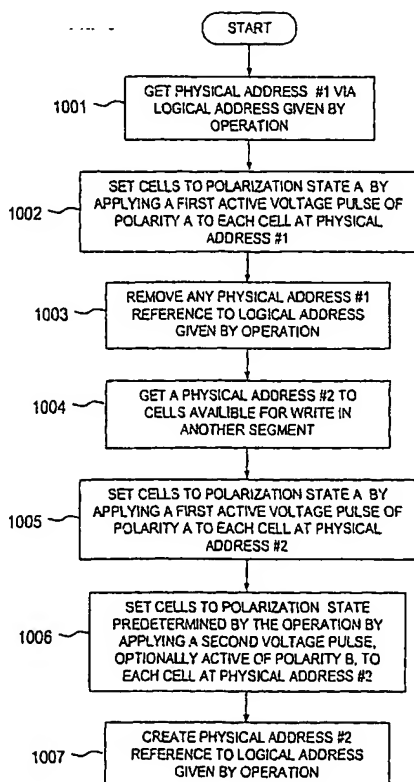
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(54) Title: METHOD FOR OPERATING A DATA STORAGE APPARATUS EMPLOYING PASSIVE MATRIX ADDRESSING



(57) Abstract: In a method for reducing detrimental phenomena related to disturb voltages in a data storage apparatus employing passive matrix addressing, particularly a memory device or a sensor device, an application of electric potentials conforming to an addressing operation is generally controlled in a time-coordinated manner according to a voltage pulse protocol. In an addressing operation a data storage cell is set to a first polarization state by means of a first active voltage pulse and then, dependent on the voltage pulse protocol, a second voltage pulse which may be a second active voltage pulse of opposite polarity to that of the first voltage pulse, is applied and used for switching the data storage cell to a second polarization state. The addressed cell is thus set to a predetermined polarization state as specified by the addressing operation. The data storage cells of the apparatus are provided in two or more electrically separated segments such that each segment comprises a separate physical address space for the apparatus. In an addressing operation the data are directed to a segment that is selected based on information on prior and/or scheduled applications of active voltage pulses to the segments.

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